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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,793	02/20/2004	Stephan Copeland	030685	7183

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EXAMINER

KING, ANITA M

ART UNIT PAPER NUMBER

3632

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,793	<b>Applicant(s)</b> COPELAND, STEPHAN	
	<b>Examiner</b> Anita M. King	<b>Art Unit</b> 3632	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*[Handwritten signature]*

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This is the second office action for application number 10/783,793, Mechanical Arm with Spring Counterbalance, filed on February 20, 2004.

### ***Drawings***

The drawings were received on February 25, 2005. These drawings are approved.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, and 7-10 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,682,749 to Strater. Strater discloses a mechanical arm (2) comprising: a base (1); a first linkage (5) pivotally attached to the base at a first pivot (8); a second linkage (6) pivotally attached to the first linkage at a second pivot (9); a first spring (25) attached between an anchor point (30) defined on the first linkage and the first pivot; a second spring (25) attached between an anchor point (30) defined on the second linkage and the second pivot; wherein the first and second pivots comprise a first axle (14) and a second axle (14) respectively, a first ring (19) disposed around the first axle and a second ring (19) disposed around the second axle, and wherein the springs are attached to the pivots via an attachment (21, 23, 24) to the rings; wherein the springs are attached to the pivot points via a hole (formed by ends 41 & 42) disposed in the rings; wherein the first and second axles are hollow (Fig. 2); wherein the base and one

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end of the first linkage are rotatably attached to the first axle and further wherein the other end of the first linkage and one end of the second linkage are rotatably attached to the second axle; wherein the first and second linkage are comprised of a hollow sheathing (Col. 5, line 17ff) and further wherein the first and second springs and the first and second rings are hidden from view within the hollow sheathings; and an attachment (3), the attachment being rotatably attached to the other end of the second linkage.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Strater in view of U.S. Patent 5,108,061 to Vlasak or U.S. Patent 4,447,031 to Souder, Jr. et al, hereinafter, Souder, or U.S. Patent 6,550,734 to Spadea. Strater further discloses that the attachment is a support plate. Strater discloses the claimed invention except for the limitation of the attachment being selected from a group consisting of a lamp, a computer monitor, a lab instrument, and a microphone. Vlasak teaches a mechanical arm having an attachment (7) attached to a linkage system of the arm, and wherein the lamp can be considered a lab instrument. Souder teaches a mechanical arm attached to a monitor (22). Spadea teaches a mechanical arm attached to a microphone. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the attachment in Strater to have included any one of the attachments as taught by Vlasak, Souder, or Spadea for the purpose of providing a

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versatile mechanical arm capable of supporting various objects in a particular environment.

Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Strater. Strater discloses the claimed invention except for the limitation of the sheathings being constructed of a material selected from a group consisting of metal and plastic. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the sheathing in Strater of a sturdy material such as metal or plastic material based on the materials suitability for its intended use and since such a modification would not have produced any unexpected results

#### ***Allowable Subject Matter***

Claims 3-6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed February 25, 2005 have been fully considered but they are not persuasive. The rejections advanced against claims 1, 2, 7-11 and 13 stand.

Applicant's arguments, see amendment, filed February 25, 2005, with respect to claims 3-5 have been fully considered and are persuasive. The rejection of claims 3-5 has been withdrawn.

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In response to applicant's argument that Strater does not disclose the limitation of the first spring being attached between an anchor point defined on the first linkage and the first pivot point, the claimed limitation states that the first spring is attached between an anchor point on the first linkage and a pivot point, the spring (25) in Strater is attached to rod segment (27) which is affixed to the first linkage between the first pivot point (8) and the anchor point (30) and thus, Strater does indeed meet this limitation.

In response to applicant's argument that Strater reference 14 is a bolt rather than a axle, the bolt in Strater is used as a pivoting means on which the linkages pivot so it can be construed as an axle in the broadest sense of the word.

In response to applicant's argument that element 19 in Strater is arc-segmented brake, the element 19 of Strater in the broadest sense can be construed as a ring since in Column 5, line 44 of the reference, the element is said to have a ring-like shape.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita M. King whose telephone number is (571) 272-6817. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leslie A. Braun can be reached on (571) 272-6815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Anita M. King  
Primary Examiner  
Art Unit 3632

May 16, 2005